

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: HALO

Report Number: P328685

Luminaire Tested: **L815SQ30NF940MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P328685
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-290-24)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: L815SQ30NF940MB
Description: Square Track 26x1, 3000lm, 22°, 4000K, black finish
Light Source: (26) 4000K CCT, 92 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

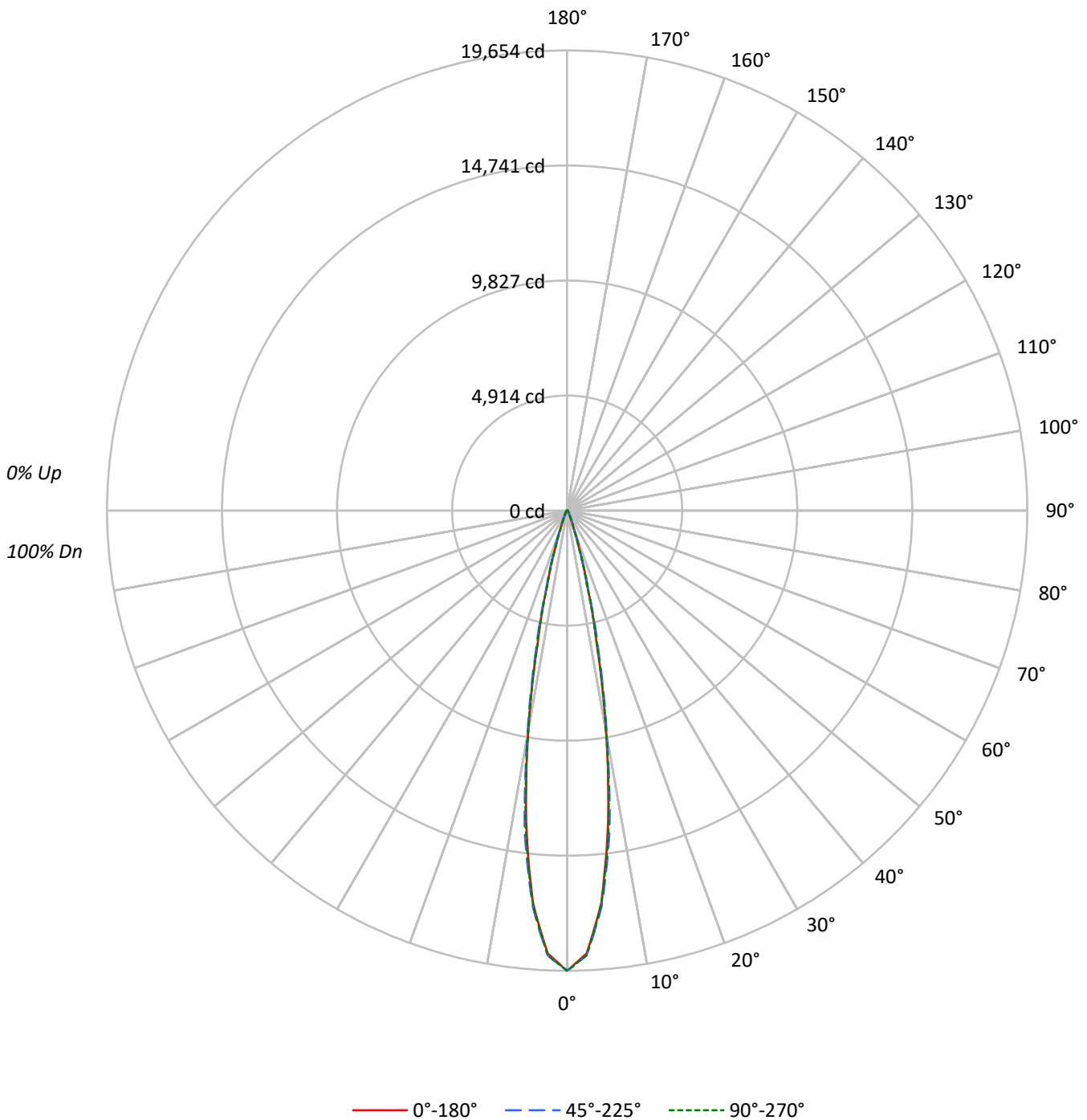
Lumens per Lamp: N/A
Luminaire Lumens: 2806.0 lumens
Efficiency: N/A
Efficacy: 82.5 lumens/watt
Spacing Criteria (0/90/45): 0.34 / 0.34 / 0.33
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|---|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | | |
| RC | 80 | | | | | 70 | | | | | 50 | | | | | 30 | | | | | 10 | | | | | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | | |
| 1 | 115 | 113 | 111 | 110 | 113 | 111 | 109 | 108 | 107 | 106 | 105 | 103 | 102 | 101 | 100 | 99 | 99 | 99 | 97 | 97 | 97 | 97 | 97 | 97 | | |
| 2 | 112 | 108 | 105 | 103 | 110 | 106 | 104 | 102 | 103 | 101 | 100 | 101 | 99 | 97 | 98 | 97 | 95 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | | |
| 3 | 108 | 104 | 100 | 98 | 107 | 103 | 99 | 97 | 100 | 98 | 95 | 98 | 96 | 94 | 96 | 94 | 93 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | | |
| 4 | 105 | 100 | 97 | 94 | 104 | 99 | 96 | 93 | 97 | 94 | 92 | 95 | 93 | 91 | 94 | 92 | 90 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | | |
| 5 | 103 | 97 | 93 | 90 | 101 | 96 | 93 | 90 | 95 | 92 | 89 | 93 | 91 | 89 | 92 | 90 | 88 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | | |
| 6 | 100 | 94 | 91 | 88 | 99 | 94 | 90 | 87 | 92 | 89 | 87 | 91 | 88 | 86 | 90 | 88 | 86 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | | |
| 7 | 98 | 92 | 88 | 85 | 97 | 91 | 88 | 85 | 90 | 87 | 85 | 89 | 86 | 84 | 88 | 86 | 84 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | | |
| 8 | 96 | 90 | 86 | 83 | 95 | 89 | 86 | 83 | 88 | 85 | 83 | 88 | 85 | 83 | 87 | 84 | 82 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | | |
| 9 | 94 | 88 | 84 | 82 | 93 | 87 | 84 | 81 | 87 | 83 | 81 | 86 | 83 | 81 | 85 | 83 | 81 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | | |
| 10 | 92 | 86 | 82 | 80 | 91 | 85 | 82 | 80 | 85 | 82 | 80 | 84 | 81 | 79 | 84 | 81 | 79 | 78 | 78 | 78 | 78 | 78 | 78 | 78 | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|---------|---------|---------|
| 0° | 1903941 | 1903941 | 1903941 |
| 5° | 1632246 | 1648077 | 1638120 |
| 10° | 941479 | 963651 | 944518 |
| 15° | 331357 | 352118 | 326192 |
| 20° | 89144 | 105165 | 89144 |
| 25° | 34087 | 36845 | 32356 |
| 30° | 19934 | 19363 | 19274 |
| 35° | 14109 | 14026 | 14546 |
| 40° | 9965 | 9497 | 10901 |
| 45° | 8672 | 8069 | 8974 |
| 50° | 7777 | 7882 | 8545 |
| 55° | 7212 | 6097 | 7212 |
| 60° | 6859 | 6568 | 7556 |
| 65° | 6418 | 7427 | 5731 |
| 70° | 3541 | 3767 | 6061 |
| 75° | 3855 | 3032 | 2770 |
| 80° | 837 | 0 | 0 |
| 85° | 0 | 1667 | 7336 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 1379.8 | 49.2 |
| 10°-20° | 1052.7 | 37.5 |
| 20°-30° | 178.5 | 6.4 |
| 30°-40° | 73.6 | 2.6 |
| 40°-50° | 49.4 | 1.8 |
| 50°-60° | 37.6 | 1.3 |
| 60°-70° | 25.0 | 0.9 |
| 70°-80° | 7.2 | 0.3 |
| 80°-90° | 2.3 | 0.1 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 2611.0 | 93.1 |
| 0°-40° | 2684.6 | 95.7 |
| 0°-60° | 2771.6 | 98.8 |
| 0°-90° | 2806.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2806.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 19654 | 19654 | 19654 | 19654 | 19654 | |
| 5° | 16785 | 16864 | 16948 | 16936 | 16845 | 1365 |
| 15° | 3304 | 3394 | 3511 | 3415 | 3252 | 1019 |
| 25° | 319 | 325 | 345 | 320 | 303 | 172 |
| 35° | 119 | 119 | 119 | 115 | 123 | 73 |
| 45° | 63 | 57 | 59 | 62 | 66 | 49 |
| 55° | 43 | 43 | 36 | 40 | 43 | 38 |
| 65° | 28 | 30 | 32 | 30 | 25 | 23 |
| 75° | 10 | 9 | 8 | 11 | 7 | 7 |
| 85° | 0 | 1 | 2 | 0 | 7 | 2 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|---------|---------|---------|---------|---------|
| 0° | 19653.5 | 19653.5 | 19653.5 | 19653.5 | 19653.5 |
| 2.5° | 18932.5 | 18973.7 | 19018.6 | 18973.7 | 19012.7 |
| 5° | 16784.8 | 16863.6 | 16947.6 | 16936.5 | 16845.2 |
| 7.5° | 13399.1 | 13610.5 | 13871.2 | 13613.5 | 13581.8 |
| 10° | 9570.8 | 9752.7 | 9796.2 | 9699.7 | 9601.7 |
| 12.5° | 5877.3 | 6118.8 | 6203.5 | 6143.1 | 5954.6 |
| 15° | 3303.9 | 3393.8 | 3510.9 | 3415.1 | 3252.4 |
| 17.5° | 1726.4 | 1808.1 | 1919.3 | 1814.7 | 1637.2 |
| 20° | 864.7 | 950.1 | 1020.1 | 936.8 | 864.7 |
| 22.5° | 483.1 | 511.9 | 572.3 | 489.8 | 452.9 |
| 25° | 318.9 | 324.8 | 344.7 | 319.6 | 302.7 |
| 27.5° | 232.7 | 232.0 | 234.2 | 222.4 | 221.7 |
| 30° | 178.2 | 178.2 | 173.1 | 171.6 | 172.3 |
| 32.5° | 137.7 | 139.9 | 139.2 | 141.4 | 142.9 |
| 35° | 119.3 | 118.6 | 118.6 | 114.9 | 123.0 |
| 37.5° | 88.4 | 91.3 | 92.1 | 86.9 | 96.5 |
| 40° | 78.8 | 76.6 | 75.1 | 83.2 | 86.2 |
| 42.5° | 67.0 | 71.4 | 71.4 | 74.4 | 75.9 |
| 45° | 63.3 | 56.7 | 58.9 | 61.9 | 65.5 |
| 47.5° | 58.2 | 56.0 | 53.8 | 61.1 | 59.7 |
| 50° | 51.6 | 53.0 | 52.3 | 53.8 | 56.7 |
| 52.5° | 49.3 | 50.1 | 45.7 | 47.1 | 53.0 |
| 55° | 42.7 | 42.7 | 36.1 | 39.8 | 42.7 |
| 57.5° | 33.1 | 36.1 | 29.5 | 39.8 | 35.4 |
| 60° | 35.4 | 35.4 | 33.9 | 38.3 | 39.0 |
| 62.5° | 26.5 | 32.4 | 32.4 | 35.4 | 33.1 |
| 65° | 28.0 | 29.5 | 32.4 | 29.5 | 25.0 |
| 67.5° | 15.5 | 11.0 | 11.8 | 14.7 | 17.7 |
| 70° | 12.5 | 17.7 | 13.3 | 13.3 | 21.4 |
| 72.5° | 3.7 | 7.4 | 6.6 | 3.7 | 2.2 |
| 75° | 10.3 | 8.8 | 8.1 | 11.0 | 7.4 |
| 77.5° | 3.7 | 7.4 | 5.2 | 0.7 | 8.8 |
| 80° | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 |
| 82.5° | 5.2 | 2.2 | 2.9 | 0.7 | 8.8 |
| 85° | 0.0 | 0.7 | 1.5 | 0.0 | 6.6 |
| 87.5° | 1.5 | 2.2 | 7.4 | 3.7 | 1.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)